



STATE OF MARYLAND

DMMH

Maryland Department of Health and Mental Hygiene
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Office of Preparedness & Response

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November 30, 2007

Public Health & Emergency Preparedness Bulletin: # 2007:47 **Reporting for the week ending 11/24/07 (MMWR Week #47)**

CURRENT HOMELAND SECURITY THREAT LEVELS

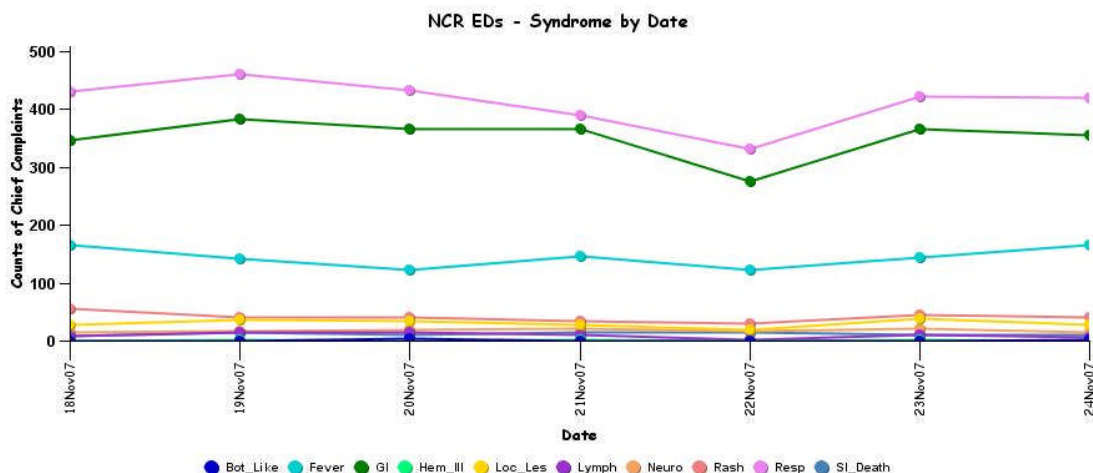
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

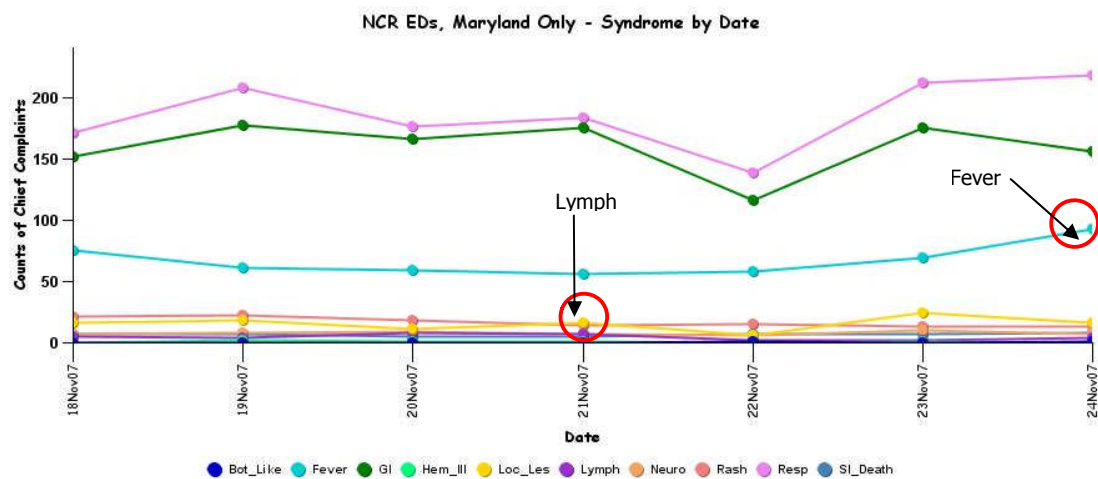
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

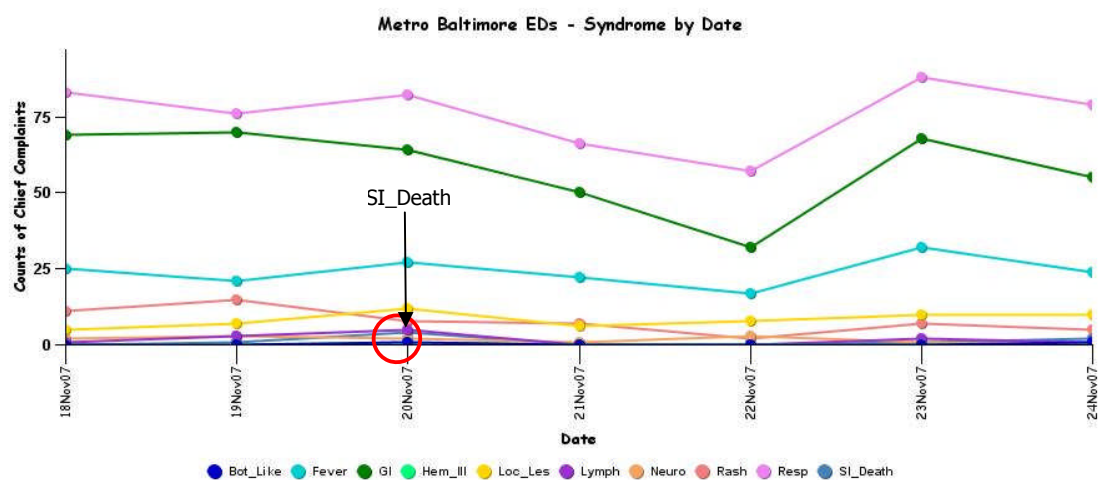
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



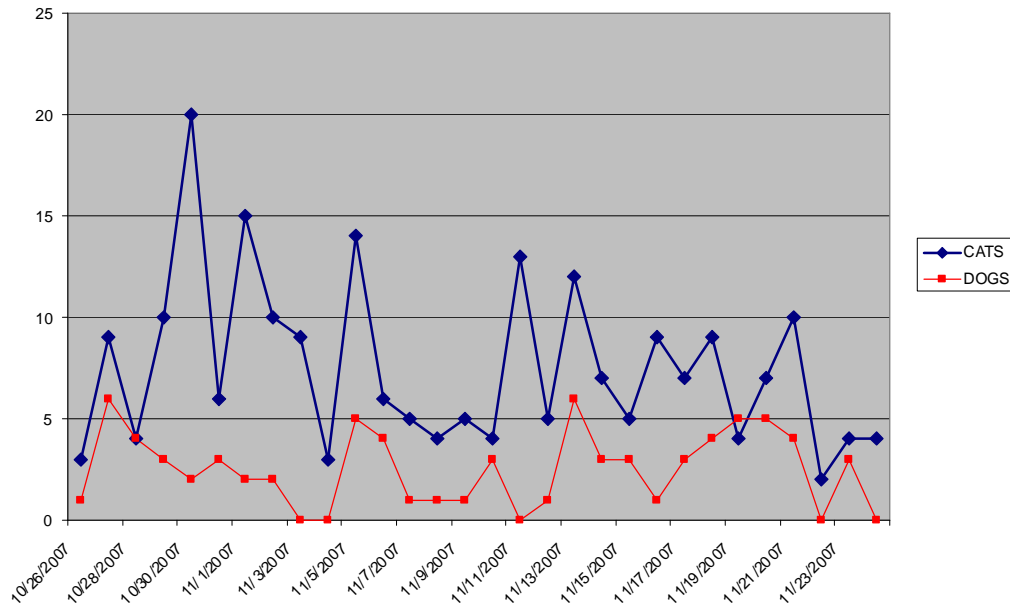
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

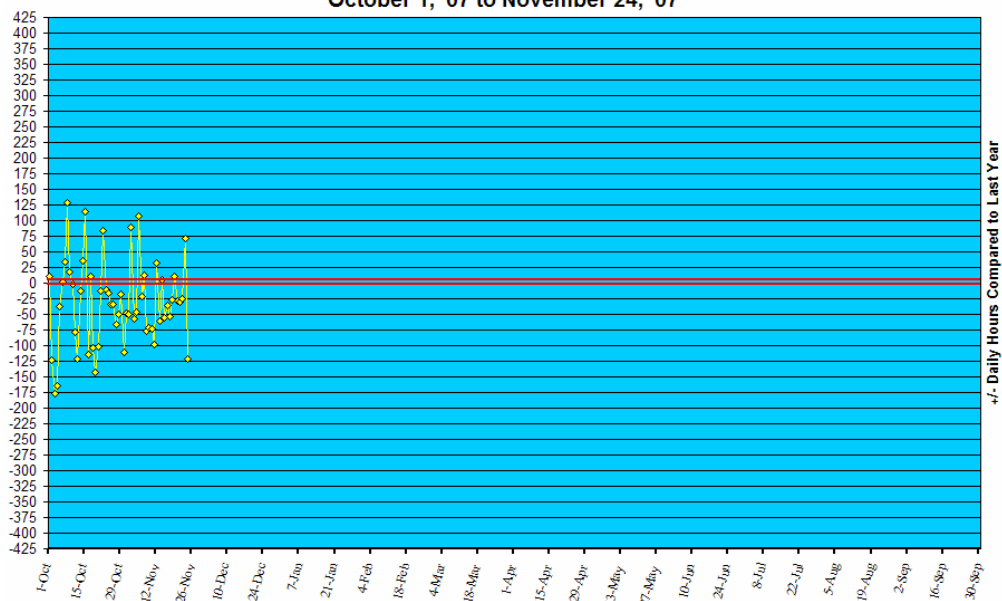
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

**Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '07 to November 24, '07**



REVIEW OF MORTALITY REPORTS

OCME: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2007 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases:	12	-
Prior week:	11	-
Week#47, 2006:	7	-

OUTBREAKS: 3 outbreaks were reported to DHMH during MMWR Week 47 (Nov. 18- Nov. 24, 2007):

1 Gastroenteritis outbreak

1 outbreak of GIARDIASIS

1 Foodborne gastroenteritis outbreak

1 outbreak of SCOMBROID POISONING associated with a Convenience Store/Gas Station

1 Respiratory illness outbreak

1 outbreak of PNEUMONIA associated with a School

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. No cases of influenza were reported to DHMH during MMWR Week 47 (November 18 - 24, 2007). Based on surveillance definitions, there are no lab confirmed influenza cases in Maryland to date this season.

***Please note:** Influenza data reported to DHMH through the National Electronic Disease Surveillance System (NEDSS) is provisional and subject to further review.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:
<http://bioterrorism.dhmh.state.md.us/flu.htm>

WHO update: As of November 12, 2007, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 335, of which 206 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

AVIAN INFLUENZA (Saudi Arabia): 20 Nov 2007, A poultry market in the Aziziyah district of Riyadh was cordoned off after inspectors identified 4 cases of bird flu there on Nov 19 during a random inspection. An emergency team, assigned by the Ministry of Agriculture to control the deadly virus, cordoned the market off. The team comprises officials from the

police, the municipality, the ministries of health and agriculture, and the National Commission for Wildlife Conservation and Development (NCWD). "There are 85 poultry shops in this market and each will have a minimum of 1000 birds. The team plans to cull the birds and disinfect the whole area to stop the virus from spreading," said Soliman Al-Buthi, general manager of the Environmental Health Department at the Riyadh Municipality. He added that the municipality is working with the emergency team to tackle the problem. Al-Buthi stressed that the situation is under control and called on members of the public to help the authorities tackle the problem. According to a statement issued Nov 19 by Muhammad Al-Sheha, undersecretary at the Ministry of Agriculture, the authorities have so far culled 222,000 birds in Al-Kharj, Durma, Muzamiyah, and Al-Hayati. Bird flu was discovered earlier this year in peacocks, turkeys, and parrots at a house in the east of the Kingdom. This led to a number of birds in the area being destroyed. The recent outbreak of the disease has led to poultry farm workers being examined by Ministry of Health doctors. All workers have so far tested negative. The Agriculture Ministry has called on poultry farmers to strictly implement safety regulations. It also called on the public to inform authorities about suspected bird flu cases.

AVIAN INFLUENZA (United Kingdom): 21 Nov 2007, A further 68,000 birds are being slaughtered on a 6th poultry farm in Suffolk in a bid to control the outbreak of bird flu in the region. DEFRA officials say the latest cull, more than double the other 5 combined, is precautionary and falls within the existing surveillance zone. The move comes amid fears that workers at the farm have traveled to other farms that are deemed a flu risk. More than 28,600 turkeys, ducks and geese have already been slaughtered. Acting chief veterinary officer Fred Landeg said the move is based on new information about exposure risk and stressed that all poultry keepers must immediately report any signs of the disease. A spokeswoman at the Department for the Environment, Food and Rural Affairs (DEFRA) said the latest farm is owned by the same company that operates Redgrave Park Farm near Diss, on the Norfolk-Suffolk border, where the virus was first detected earlier this month. The spokeswoman said employee routes between the farms are being monitored for signs of the disease spreading. A 3 km protection zone and 10 km surveillance zone were immediately set up, and remain in place. The 6th cull will include 56,000 ducks, 9000 turkeys and 3000 geese. Bird flu has been confirmed at both the original site of the outbreak and one other nearby site owned by the same company. The latest premises to be added to the cull list supplied poultry to the farm at the centre of the outbreak, but this latest move is more linked to employee movement, the spokeswoman said. On Nov 20, it was confirmed that turkeys culled at 2 other farms over fears they had been exposed to the disease tested negative. These were Stone House, in West Harling, and Bridge Farm, in Pulham, both in Norfolk. On Nov 19, tests showed birds at Hill Meadow Farm in Knettishall on the Norfolk/Suffolk border had been infected with H5N1. Another of the farms, Grove Farm, Botesdale, Suffolk was upgraded to a slaughter site on suspicion of having the disease last week, after dozens of birds were found dead by officials. But initial tests on 5500 turkeys slaughtered found the premises were free of disease.

AVIAN INFLUENZA, LPAI H7, SUSPECTED (South Korea): 24 Nov 2007, South Korea's first bird flu outbreak in 8 months forced the slaughter of thousands of ducks in the country's south on Nov 24, although the deadly H5N1 virus was not involved, the government said. The virus that caused the latest outbreak was a "low pathogenic" H7 strain that has not been known to spread to humans, said an official at the Ministry of Agriculture and Forestry. Quarantine workers slaughtered about 17,000 ducks at the farm in Gwangju, about 330 km southwest of the capital, Seoul, the official said on condition of anonymity, citing office policy. The outbreak, South Korea's first since March, was confirmed on Nov 23, the ministry official said. A total of 7 outbreaks of the lethal H5N1 virus hit poultry farms across South Korea between November 2006 and March this year, resulting in the slaughter of about 2.8 million birds. The country declared itself free of bird flu in June 2007 after reporting no new outbreaks for 3 months. The latest outbreak does not affect South Korea's bird flu-free status because it involves a "low pathogenic" virus, the ministry official said.

NATIONAL DISEASE REPORTS:

SALMONELLOSIS, FROZEN POULTRY PIE (Multi State): 19 Nov 2007, The Illinois Department of Public Health is again warning consumers to throw out frozen pot pies that could be linked to a multi state salmonellosis outbreak. ConAgra Foods voluntarily recalled all varieties of frozen pot pie products in October 2007, produced under multiple brand names. The department continues to receive reports of those sickened by eating the recalled food during the past month. To date, Illinois has seen 15 cases of salmonellosis believed to be associated with eating the recalled pot pies, compared to 6 cases as of Oct 12, when the first warning was issued. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, HUMAN (Virginia): 21 Nov 2007, The Virginia Department of Health has confirmed a second death connected to the recent investigation of 2 possible botulism cases. A 75 year old retired anesthesiologist, who lived in Roanoke County, was diagnosed with botulism and died on Nov 16. The death of his wife, a 57 year old female physician, on Nov 12 was said to be "related to botulism poisoning". Authorities have not said if botulism was responsible for the 1st death or connected to the 2nd, unconfirmed, case. Local health officials have said that with the recent proliferation of public health emergencies in the Roanoke area, there was less attention paid to informing the public about the causes and dangers of botulism. Robert Parker, a regional spokesman for the health department, said the department has not treated the reported botulism cases as a public health emergency because it believes that the incidents were isolated and related to the home canning of food. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

NOROVIRUS, FOODBORNE (California): 21 Nov 2007, One of the 99 people suffering from an outbreak of gastrointestinal illness at an Aptos hotel has tested positive for norovirus, the chief of Santa Cruz County Public Health has confirmed on Nov 16. The public health department issued an advisory regarding the outbreak of a foodborne illness at a restaurant in the Seascope Resort and Conference Center. Since the outbreak the health agency worked to contact more than 1000 people who visited the hotel between Nov 9 and 15. "We are just monitoring the Seascope for the meantime," said Bob Kennedy, chief of Santa Cruz County Public Health. The health agency was contacted on Nov 13 regarding 16 people who had become ill out of a group of 64 that had been involved in a weekend event between Nov 9 and 11. The restaurant reopened on Nov 16 after a thorough cleaning of all facilities and a complete review of procedures with 71 hotel and restaurant employees. New policies have been put into place to help combat future outbreaks, including an hourly hand-washing cycle, illness checks at the beginning of each shift and a log of the checks to be reviewed by Santa Cruz County Public Health. With the upcoming holiday season Kennedy recommends that people use proper food-handling techniques and wash their hands frequently. Norovirus causes nausea, vomiting and diarrhea and can be fatal to the elderly if left untreated due to symptoms like dehydration. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, RABBIT (New Mexico): 24 Nov 2007, No anthrax was found in the rooms where an anthrax-positive research rabbit lived at the University of New Mexico, the State Department of Health said on Nov 22. Swabs taken on Nov 16 from rooms exposed to the laboratory rabbit, exposed to a wild strain of anthrax, showed no traces of the bacteria, said department spokeswoman Deborah Busemeyer. Still, 2 employees who had contact with the rabbit were given antibiotics that are used to treat infections caused by exposure to anthrax, which can be passed from animal to human. About 20 UNM laboratory workers were also to be given antibiotics as a precaution, said Sam Giammo, a UNM Health Sciences Center spokesman. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CHOLERA (Democratic Republic of Congo): 18 Nov 2007, Some 272 cases of cholera, including 8 deaths, have been detected since the beginning of September in a north eastern district of the Democratic Republic of Congo, a WHO official said on Nov 16. The cases have occurred in the Tchomia health zone within the Ituri district, said Eustace Kyrrousis, head of the WHO office in the area. Numerous cases have been detected on the small island of Rukwanzi in Lake Albert, recently inhabited by fishermen and their families, said local official Dieudonne Rwabona. "On Rukwanzi, an island of 3 square kilometers, there is no health center or latrine," Rwabona said. Congolese police have begun evacuating the families from the island and sending them back to their villages of origin. The cholera outbreak in the region has essentially been due to a lack of drinkable water, forcing residents to consume non-treated water from Lake Albert. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA, SHELLFISH (Thailand): 20 Nov 2007, The Public Health Ministry is keeping a close eye on 12 provinces for signs of cholera after several people died from eating half-cooked food. Disease Control Department (DCD) director general Dr Thawat Suntrajarn said on Nov 19 checks had been made on the spread of cholera across the country from January to November 2007. It uncovered 761 people with severe diarrhea caused by cholera, 7 of whom had died. Thawat said the ministry had brought the disease under control but close monitoring was needed in Khon Kaen, Udon Thani, Sakon Nakhon, Lamphun, Roi Et, Maha Sarakham, Kalasin, Nakhon Phanom, Samut Sakhon, Nong Khai, Ayutthaya, and Mukdahan. Most people in the provinces still ate half cooked food like cockles, which was sometimes tainted with cholera bacteria. Thawat said the Laos Public Health Ministry claimed it had found cholera bacteria in fresh cockles imported from the north east Thailand. But he rejected the claim, as Thailand had never exported fresh cockles to Laos. He said the Fisheries Department also had not found any contamination in cockle farms across the country. He believed the contamination found in Laos might have occurred during transport after a merchant crossed the border and bought cockles for shipment back to his country. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER (Democratic Republic of Congo): 21 Nov 2007, Health officials in the Democratic Republic of Congo on Nov 19 declared the end of an outbreak of deadly Ebola hemorrhagic fever, believed to have killed up to 187 people over 8 months. Congo's Health Ministry and the World Health Organization (WHO) said that a 42 day period following the death of the last Ebola victim had ended on Nov 13. Despite not recording a new Ebola infection in over a month and a half, officials said it was standard practice to wait 42 days, twice Ebola's maximum incubation period, before announcing the end of an outbreak. People began falling ill in April in the village of Kampungu in Western Kasai province with Ebola-like symptoms, including fever and muscle pain, followed by vomiting, diarrhea, and internal hemorrhaging. The presence of the disease was not confirmed until September. Experts from WHO and the medical charity Medecins Sans Frontieres (MSF) rushed to bring in medical equipment and sanitation products, and 2 mobile laboratories to help deal with the crisis. The remoteness of the affected areas and Congo's lack of infrastructure magnified the problems of tackling the outbreak. It remains unclear how many of a total of 264 suspected cases were due to Ebola, which has no cure and kills 50 to 90 per cent of its victims. Outbreaks of typhoid fever and shigella, both of which have symptoms similar to Ebola, occurred simultaneously in the affected areas. Of 110 samples taken from suspected Ebola victims, 26 tested positive for the disease. The health officials said on Nov 19 that epidemiologists were trying to determine the origin of the outbreak, which they suspect may have been transmitted by migrating bats, which

were hunted and eaten by local villagers. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, UNIVERSITY (Canada): 21 Nov 2007, The number of people sickened by the salmonella food poisoning outbreak at the University of Western Ontario continued to climb as 11 new cases were confirmed on Nov 20, pushing the total to 64 lab-confirmed cases. In addition to the 64 lab-confirmed cases, 56 people have reported clinical symptoms of salmonella but haven't been tested. On Nov 9, the Middlesex-London Health Unit conducted a thorough health inspection at Pita Pit in the University Community Centre (UCC) after 5 cases of salmonella poisoning were linked to food served at the franchise Nov 1-2. Since the original outbreak, many students have contacted the Health Unit, reporting fever, vomiting, and diarrhea from eating at Pita Pit. Health inspectors at the Health Unit were surprised to discover 12 students with lab-confirmed salmonella infections who had not eaten food prepared at Pita Pit. In all 12 cases, students purchased food prepared at UCC CentreSpot, Dr Bryna Warshawsky, associate medical officer of health at MLHU (Middlesex-London Health Unit), confirmed. Dr Warshawsky said the Health Unit has formulated a few hypotheses to explain the cross-contamination. "We suspect the original source of contamination occurred at Pita Pit around Nov 2, and that widespread contamination happened the week of Nov 5-9," she said. The source of the outbreak remains undetermined. "We are working really hard to figure out what it is, to make sure it doesn't happen again," Dr Warshawsky said, noting the Health Unit has already completed 9 inspections of the premises. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER (Uganda): 21 Nov 2007, The mysterious viral outbreak in western Uganda's Bundibugyo district has been contained, Dr Sam Okware, the health ministry's commissioner of health services, has confirmed. The disease has symptoms similar to Marburg hemorrhagic fever. "There are no more infections, and deaths have reduced. The patients are also recovering quickly. The viral attack has been contained, and we hope there will be no more deaths," Dr. Okware said. By press time, the Centers for Disease Control and Prevention in the United States had not yet determined what the disease was, after analyzing the 20 blood samples Uganda's health ministry sent them. One more person died of the virus last week. This raises the death toll to 14 people over the last 3 months. "There is a likelihood that it might be Rift Valley fever, typhus fever or leptospirosis," Dr Okware explained. He said that if it is Rift Valley fever there is need for greater care. "This disease is very infectious, since it is transmitted by mosquitoes from animal to animal and from animals to man." Dr Okware said the viral outbreak had been clustered into 3 groups. The first he said comprised a family who may have eaten an infected goat. All the 15 family members were infected, and 4 of them, including a boy, died. The second involved a patient admitted to the labor ward in Kikyo Health Centre who in due course infected 5 other people with the virus. Four of them died days later. Okware said the third group was infected after handling the bodies of the victims without any protective gear. Six of the 20 who were infected died. According to the team from Bundibugyo, the disease is in 12 villages of the district. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmm.state.md.us/>

Outbreak of norovirus gastroenteritis among staff at a hospital in Barcelona, Spain, September 2007

This report summarizes an outbreak of acute gastroenteritis among 38 health care workers employed at a hospital in Barcelona, Spain in September 2007. The hypothesis that the outbreak was food-borne was confirmed by the results of the epidemiological analysis and by the identification of norovirus in two stool samples taken from cases. (<http://www.eurosurveillance.org/ew/2007/071122.asp#5>)

Norovirus Outbreak Associated with Ill Food-Service Workers - Michigan, January-February 2006

MMWR 2007; 56(46):1212-16. This report summarizes the findings of an outbreak investigation in early 2006 by the Barry-Eaton District Health Department (BEDHD) in Michigan, in which 364 restaurant patrons became ill after a meal at a national chain restaurant. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5646a2.htm>)

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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